

ABSTRACT

The present invention provides a movement decision method for determining direction and distance of one-dimensional movement of image capturing object or image capturing element for capturing two-dimensional sub-pixel motion image suitable for super-resolution processing, and an image capturing device using this movement decision method.

while image capturing object is moved along a predetermined one-dimensional moving direction, sequential image of image capturing object is captured by fixed image capturing device, sequential image is set to two-dimensional sub-pixel motion image suitable for super-resolution processing, and one-dimensional moving direction of image capturing object in a coordinate system normalized by aspect ratio of pixel of image capturing element within image capturing device is determined to p/q of a rational number, wherein: one pixel of vertical direction of coordinate system is divided by an integer p , and one pixel of horizontal direction of coordinate system is divided by an integer q .